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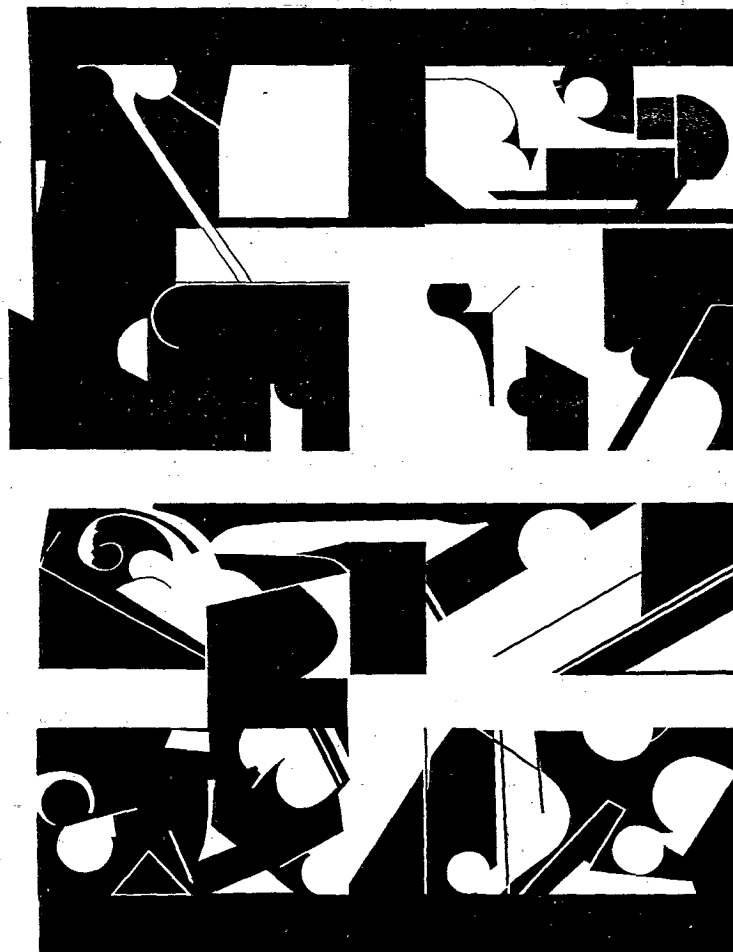
- Nucleic Acid Technologies Foundation
- Vice President for Research,
State University of New York, Albany

Contributors

- American Cyanamid Company
- Boehringer Mannheim Biochemicals, Inc.
- Hoffmann-La Roche, Inc.
- Sterling Research Group
- The Council for Tobacco Research - USA, Inc.

The 1991 Albany Conference was organized by:

- Center for Molecular Genetics,
University at Albany • SUNY
- Albany Medical College
- Sterling Research Group
- Nucleic Acid Technologies Foundation



SEPTEMBER 12-15, 1991

MOLECULAR ^{and} CELLULAR
RESPONSES TO *Oxygen*

THE ALBANY CONFERENCES

For information concerning this conference or future
conferences contact:

The Albany Conferences

P.O. Box 8836 • Albany, NY 12208-0836

Phone 518-442-4327 • FAX: 518-442-4767

SCHEDULE

Scientific Sessions

Scientific sessions will be held in the Guggenheim Pavilion auditorium on the following schedule:

Thursday	8 pm	Welcome Keynote Lecture
Friday	9 am	Regulation of aerobic and anaerobic gene expression in prokaryotes
	3-5 pm	Poster Session
	7:30 pm	Regulation of aerobic and anaerobic gene expression in eukaryotes
Saturday	9 am	Oxidative stress response (I)
	2:30 pm	Workshops
	4-5 pm	Poster Session
	7:30 pm	Oxidative stress response (II)
Sunday	9 am	Clinical implications

Activities and additional workshops will be announced at each morning session.

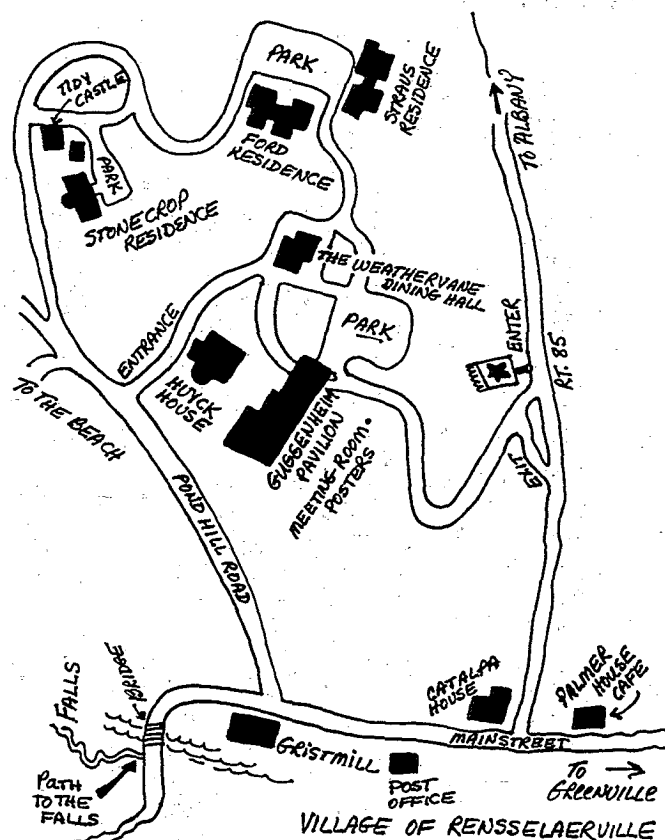
Meals

Meals will be served in the Weathervane Restaurant on the following schedule:

Friday, Saturday, Sunday	Breakfast	7-8:30 am
Friday	Cookout	1:30 pm
Saturday	Lunch	1-2 pm
Sunday	Lunch	11:30-1 pm
Thursday, Friday, Saturday	Dinner	5:30-7 pm

Refreshments will be served in the Guggenheim Pavilion, mid-way through the morning sessions and during the poster sessions. A cash bar will be available from 4-5:30 pm on the first floor of Huyck residence, and during the evening meals in the Weathervane Restaurant. In addition, beer and soda are available in the Ford, Huyck, Stonecrop and Straus residences on a pay-as-you-go basis.

RENSSELAERVILLE CAMPUS



ACKNOWLEDGEMENTS

Organizing Committee

Harry W. Taber

Albany Medical College

Richard P. Cunningham

David A. Shub

Richard Zitomer

University at Albany • SUNY

Alan M. Ezrin

Robert J. Gordon

Sterling Research Group

Conference Committee

Harry W. Taber

Albany Medical College

Carole A. Keith

David A. Shub

Center for Molecular Genetics, SUNY at Albany

Rudolf Deibel

Nucleic Acid Technologies Foundation

Mehdi Shayegani

*Wadsworth Center for Laboratories and
Research, NYS Department of Health*

Program and Poster Design

Carole A. Keith

Blue and white 5 by Takeshi Kawashima

*Our thanks to the staff of the Rensselaerville
Institute Conference Center, Rensselaerville, NY.*



Thursday Evening

PROGRAM

8:00 PM

Welcome

David A. Shub

*Center for Molecular Genetics
University at Albany • SUNY*

Introduction of Keynote Speaker

Harry W. Taber

Albany Medical College

Keynote Address

Irwin Fridovich

*Duke University Medical School
Superoxide sensitive enzymes and
a circuit breaker.*

**REGULATION OF AEROBIC AND
ANAEROBIC GENE EXPRESSION
IN PROKARYOTES**

Valley Stewart, Chair

E.C.C. Lin

Harvard University Medical School

**The arc system controlling aerobic pathways in
Escherichia coli.**

John R. Guest

University of Sheffield

**FNR and oxygen-regulated gene expression in
Escherichia coli.**

August Böck

University of Munich

**Regulation of fermentative metabolism in
Escherichia coli. The formate regulon.**

Robert P. Gunsalus

University of California, Los Angeles

**Coordinate regulation of aerobic and
anaerobic electron transport pathway genes
in facultative bacteria (*Escherichia coli*).**

Valley Stewart

Cornell University

**Nitrate regulation of anaerobic respiratory
gene expression in *Escherichia coli*.**



Sunday Morning

9:00 AM

CLINICAL IMPLICATIONS

John W. Eaton, Chair

Bruce A. Freeman

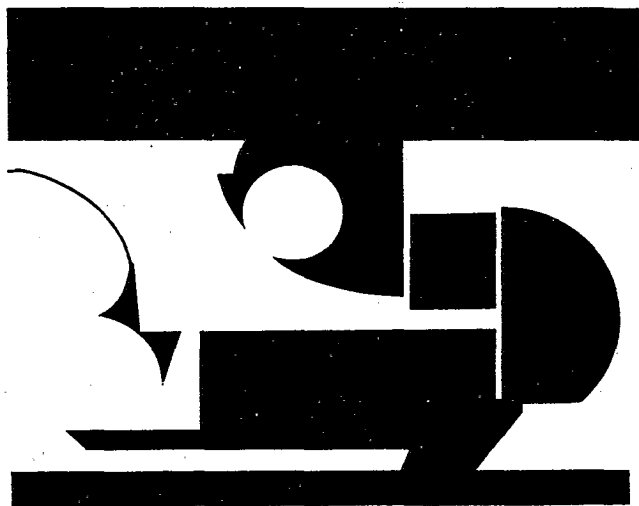
University of Alabama

Metabolism of reactive oxygen species in the
intravascular compartment.

John M. Shoffner

Emory University School of Medicine

Oxidative phosphorylation diseases:
Clinical and genetic implications.



Irwin Fridovich

Duke University Medical School

Conference Overview



Friday Evening

7:30 PM

**REGULATION OF AEROBIC AND
ANAEROBIC GENE EXPRESSION IN
EUKARYOTES**

Richard S. Zitomer, Chair

Richard S. Zitomer

University at Albany • SUNY

Regulation of gene expression by heme
in yeast.

Thomas D. Fox

Cornell University

Translational control of yeast mitochondrial
gene expression.

Jerry S. Powell

University of California, Davis Medical Center

Regulation of erythropoietin gene
transcription by hypoxia.

Elizabeth C. Theil

North Carolina State University

Iron regulation of ferritin synthesis:
A model for mRNA structure and function.

Saturday Morning

9:00 AM

OXIDATIVE STRESS RESPONSE (I)

Richard P. Cunningham, Chair

Kelvin J.A. Davies
Albany Medical College

Defense and repair systems in oxidative stress.

Peter C. Loewen
University of Manitoba

Regulation of expression of *katF*, encoding
a putative σ factor in *Escherichia coli*.

Gisela Storz
*National Institute of Child Health
& Human Development*

OxyR, a regulator of hydrogen
peroxide-inducible genes.

Bernard Weiss
University of Michigan Medical School
The *soxRS* (superoxide response) regulon of
Escherichia coli.

Susan S. Wallace
University of Vermont
Processing of oxidative DNA damage in
Escherichia coli.

Saturday Afternoon

2:30 PM

WORKSHOP
Alan M. Ezrin
Robert J. Gordon
Reperfusion Injury

Saturday Evening

7:30 PM

OXIDATIVE STRESS RESPONSE (II)

Kelvin J.A. Davies, Chair

Daniele Touati
University of Paris VII

Regulation and protective role of the
Escherichia coli superoxide dismutases.

John W. Eaton
University of Minnesota
Oxidant defenses of colonial bacteria:
Competitive weapon systems?

Nikki J. Holbrook
National Institute on Aging
The *gadd* genes, a novel set of mammalian
stress response genes: Regulation by oxidative
stress, DNA damage and growth arrest.

Paul W. Doetsch
Emory University School of Medicine
Repair of oxidative DNA damage
in eukaryotes.

